Attorney Docket: DX0935K

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Birgit OPPMANN, et al.

Application No.: 09/521,335

Filed: March 9, 2000

For: MAMMALIAN CYTOKINES;

RELATED REAGENTS AND

METHODS

P.O. Box 1450

Examiner: R.C. Hayes

Art Unit: 1647

Conf. No.: 2729

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, August 7, 2003 .

Commissioner for Patents

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

The materials as listed in the copy of the Information Disclosure Statement filed on September 1, 2000, and Form PTO-1449 are again brought to the Examiner's attention pursuant to the duty of disclosure under 37 C.F.R. § 1.56, § 1.97, and § 1.98. Attached please find Form PTO-1449 listing references AA-BF. Also enclosed is a copy of the International Search Report, dated August 18, 2000, and received in connection with Applicants' corresponding PCT application. Copies of all documents cited on Form PTO-1449 and in the International Search Report are enclosed.

Citation of these documents should not be construed as a representation that the documents are in fact material or are in fact prior art with respect to the instant invention. The Examiner should not make any inference relating to the relative pertinence of cited references based upon the order in which the art is presented. Citation of these documents should not be construed as a representation that a search has been made or that more pertinent art may not be in existence. Applicants request that the Examiner fully consider the art cited in the attached Form PTO-1449.

Applicants further request that the Patent and Trademark Office list all such art on the front of any patent issuing from this application.

No new references have been cited. The Applicants are merely providing duplicate references originally provided in U.S. Patent Application 09/267,901, filed March 11, 1999, and in the present application.

Applicants believe that no additional fees are due with this communication. Should this not be the case, the Commissioner is hereby authorized to debit any charges or refund any overpayments to DNAX Deposit Account No. 04-1239.

Respectfully submitted,

Date: August 2003

By: Shoola Mobal

Registration No.: 41,201
Attorney for Applicants

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Oppmann et al.

For: Mammalian Cytokines; Related Reagents

and Methods

Serial No.: 09/521,335

Filing Date: March 9, 2000

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Examiner: To be assumed to the assument of the assument

September 1, 2000

Schering-Plough Corporation Kenilworth, New Jersey 07033

Assistant Commissioner for Patents Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir or Madam:

Applicants respectfully request that the following documents, as listed below and on the accompanying form PTO-1449, be considered and made of record in the above-identified application. Enclosed is a copy of the International Search Report received in connection with Applicants' corresponding PCT application. Copies of documents that were listed in the International Search Report are attached unless previously cited in the priority application Serial No. 09/267,901, filed March 11, 1999, Docket No. DX0935. No further copies will be provided absent specific request.

U.S. PATENT DOCUMENTS

5,457,038

5,741,772

FOREIGN PATENT DOCUMENTS

WO 98/33922

WO 99/00415

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on this 1st day of September

September 1.

Date



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WO 98/11225

WO 98/31811

WO 98/49307

EP 0 759 466

WO 95/11303

WO 99/20755

WO 99/28462

WO 99/35264

WO 99/40195

OTHER DOCUMENTS

DeChiara et al., "Mice lacking the CNTF receptor, unlike mice lacking CNTF, exhibit profound motor neuron deficitis at birth", Cell, 83:313-322 (1995).

Elson et al., "Definition: 'Homo sapiens cytokine-like factor-1 precursor (CLF-1) mRNA, complete cds", GenBank, Accession Number AF059293 (1998).

Elson et al., "Cytokine-like factor-1, a novel soluble protein, shares homology with members of the cytokine type I receptor family", J Immunol, 161:1371-1379 (1998).

Gately et al., "The interleukin-12/interleukin-12-receptor system: role in normal and pathologic immune responses", Annu Rev Immunol, 16:495-521 (1998).

Gough et al., "Definition: Murine mRNA for leukaemia inhibitory factor (LIF)", GenBank, Accession Number X06381 (1995).

Habecker et al., "A sweat gland-derived differentiation activity acts through known cytokine signaling pathways", J Biol Chem, 272:30421-30428 (1997).

McDonald, "Definition: 'Human CNTF gene for ciliary neurotrophic factor", GenBank, Accession Number X60542 (1991).

Pennica et al., "Definition: 'Mus musculus cardiotrophin-1 mRNA, complete cds", GenBank, Accession Number U18366 (1995).

Pennica et al., "Definition: 'Human cardiotrophin-1 (CTF1) mRNA, complete cds", GenBank, Accession Number U43030 (1996).

Saotome et al., "Definition: 'Mus musculus zinc finger protein (Pzf) mRNA, partial cds, and ciliary neurotrophic factor (Cntf) mRNA, complete cds", GenBank, Accession Number U05342 (1995).

Shelton, "Are there more members of the CNTF-GPA family?", Persp Devel Neurobiol, 4:101-107 (1996).

Stahl et al., "Definition: 'Human leukemia inhibitory factor (LIF) gene, complete cds", GenBank, Accession Number M63420, J05436 (1994).

Trinchieri, "Proinflammatory and immunoregulatory functions of interleukin-12", Intern Rev Immunol, 16:365-396 (1998).

Ware et al., "Targeted disruption of the low-affinity leukemia inhibitory factor receptor gene causes placental, skeletal, neural and metabolic defects and results in perinatal death", Development, 121:1283-1299 (1995).

Database DGENE, Last updated 13-JUN-1999, Result from sequence search using SEQ ID NO: 2, as the query and citing Accession Numbers: 99P-W94466, 98P-W56141, 98P-W29715, 98P-W56142, 98P-W29716, 97P-W29237, 96P-R88204, 95P-R83965; Derwent Information Ltd., London.

Database DGENE, Last updated 13-JUN-1999, Result from sequence search using SEQ ID NO: 12, as the query and citing Accession Numbers: 98P-W59805, 98P-W55012, 98P-W55011, 98P-W59804, 98P-W55014, 98P-W55015, 98P-W55016, 92P-R26334, 97P-W17859, 96P-R94576, 92P-R24273, 92P-R22228, 91P-R10795; Derwent Information Ltd., London.

Fischer et al., "A bioactive designer cytokine for human hematopoeitic progenitor cell expansion", Nat Biotechnol, 15:142-145 (1997).

Peters et al., "In vivo and in vitro activities of the gp130-stimulating designer cytokine Hyper-IL-6", J Immunol, 161:3575-3581 (1998).

Rakemann et al., "The designer cytokine hyper-interleukin-6 is a potent activator of STAT3-dependent gene transcription in vivo and in vitro", J Biol Chem, 274:1257-1266 (1999).

Shi et al., "Computational EST database analysis identifies a novel member of the neuropoietic cytokine family", Biochem Biophys Res Commun, 262:132-138 (1999).

Senaldi et al., "Novel neurotrophin-1/B cell-stimulating factor-3: a cytokine of the IL-6 family", Proc Natl Acad Sci USA, 96:11458-11463 (1999).

Applicant's submission of this Information Disclosure Statement is not an admission that any reference cited herein qualifies as prior art.

Respectfully submitted,

Schering-Plough Corporation Patent Department K-6-1, 1990 2000 Galloping Hill Road Kenilworth, New Jersey 07033 Telephone No. (908) 298-7221 Sandy S. Zaradis, Ph.D. Attorney for Applicants Registration No. 45,997

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FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.: DX0935K

SERIAL NO.:

INFORMATION DISCLOSURE STATEMENT FOR PATENT (Use several sheets if necessary)

FILING DATE:

APPLICANT:

Oppmann et al.

March 9, 2000 U.S. PATENT DOCUMENTS EXAMINER DOCUMENT DATE NAME CLASS INITIAL NUMBER AA 5,457,038 AB 5,741,772 ACFOREIGN PATENT DOCUMENTS COUNTRY DOCUMENT DATE CLASS SUB-TRANSLATION **CLASS** NO NUMBER YES WO 98/33922 ADWO 99/00415 ΑE WO 98/11225 ΑF WO 98/31811 AG WO 98/49307 AΗ EP 0 759 466 AT OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) DeChiara et al., "Mice lacking the CNTF receptor, unlike mice lacking CNTF, exhibit protound motor neuron deficitis at birth", Cell, 83:313-322 (1995). Elson et al., "Definition: 'Homo sapiens cytokine-like factor-1 precursor (CLF-1) mRNA, complete cds'", GenBank, Accession Number AF059293 (1998). Elson et al., "Cytokine-like factor-1, a novel soluble protein, shares homology with members of the cytokine type I receptor family", J Immunol, 161:1371-1379 (1998). Gately et al., "The interleukin-12/interleukin-12-receptor system: role in normal and pathologic immune responses", AM Annu Rev Immunol, 16:495-521 (1998). Gough et al., "Definition: Murine mRNA for leukaemia inhibitory factor (LIF)", GenBank, Accession Number X06381 (1995). "A sweat gland-derived differentiation activity acts through known cytokine signaling pathways", J Habecker et al., "A sweat gland-deriv Biol Chem, 272:30421-30428 (1997). McDonald, "Definition: 'Human CNTF gene for ciliary neurotrophic factor'", GenBank, Accession Number X60542 Pennica et al., "Definition: 'Mus musculus cardiotrophin-I mRNA, complete cds'", GenBank, Accession Number U18366 (1995). "Definition: 'Human cardiotrophin-1 (CTF1) mRNA, complete cds'", GenBank, Accession Number AR Pennica et al., U43030 (1996). Saotome et al., "Definition: 'Mus musculus zinc finger protein (Pzf) mRNA, partial cds, and ciliary neurotrophic factor (Cntf) mRNA, complete cds", GenBank, Accession Number U05342 (1995). Shelton, "Are there more members of the CNTF-GPA family?", Persp Devel Neurobiol, 4:101-107 (1996). Stahl et al., "Definition: 'Human leukemia inhibitory factor (LIF) gene, complete cds'", GenBank, Accession Number M63420, J05436 (1994). Trinchieri, "Proinflammatory and immunoregulatory functions of interleukin-12", Intern Rev Immunol, 16:365-396 "Targeted disruption of the low-affinity leukemia inhibitory factor receptor gene causes placental, skeletal, neural and metabolic defects and results in perinatal death", Development, 121:1283-1299 (1995). Database DGENE, Last updated 13-JUN-1999, Result from sequence search using SEQ ID NO: 2, as the query and citing Accession Numbers: 99P-W94466, 98P-W56141, 98P-W29715, 98P-W56142, 98P-W29716, 97P-W29237, 96P-R88204, 95P-R83965; Derwent Information Ltd., London. Database DGENE, Last updated 13-JUN-1999, Result from sequence search using SEQ ID NO: 12, as the query and citing Accession Numbers: 98P-W59805, 98P-W55012, 98P-W55011, 98P-W59804, 98P-W55014, 98P-W55015, 98P-W55016, 92P-R26334, 97P-W17859, 96P-R94576, 92P-R24273, 92P-R22228, 91P-R10795; Derwent Information Ltd., London. Fischer et al., "A bioactive designer cytokine for human hematopoeitic progenitor cell expansion", Nat Biotechnol, 15:142-145 (1997). **EXAMINER** DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

					PARTMENT OF COMMERCE AND TRADEMARK OFFICE		ATTY. DOCKET NO.: DX0935K		SERIAL NO.: 09/521,335		
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